# "OUT OF OUR LANE"

# (Policies, Treaties and Agreements)

"Trying to define the path from here to there requires the identification of all elements, whether you control them or not."

> USCINCSPACE LRP Briefing, January 1998

Our preeminence in space has been secured by decades of brilliant, dedicated work by NASA, the NRO, the Space and Missile Systems Center and its legacy organizations, the Services, USSPACECOM and its Components, several other government agencies and, of course, the greatest space industry in the world. As our capabilities and national dependence on space have grown, more federal agencies and commercial developers have a stake in it. Several military and civil missions are poised to migrate to space and commercial use of space is accelerating. To invest prudently and build the right force structure, we must sharpen or develop our policies on space.

As we began planning, we knew several key policies, agreements, and treaties would require attention. But we didn't fully anticipate the volume that would emerge. As discussed in Chapters 5-8, policy issues arise for all four of our Operational Concepts—Control of Space, Global Engagement, Full Force Integration, and particularly Global Partnerships. Although they are "out of USCINCSPACE's lane," they're essential to shaping our leadership in space for the 21st Century.

Some policies unambiguously belong to particular Services and federal agencies so we look forward to future dialogue. Others issues might require discussion and decisions at the national level, perhaps by an invigorated National Space Council. Regardless of where we find resolution, these concerns are urgent and critical.

The broad and varied members of our space community enable USSPACECOM to complete its missions. Though there is no single chain of command, we all need clarifying policy to harness the strengths of our interdependence, improve efficiency, and ensure our nation's continued preeminence in space. Policies, treaties and agreements needing to be addressed, and recommendations ( $\blacksquare$ ) are listed below.

### 1. Establish National Space Surveillance Network and Sensor Policies

- Define policies and procedures for augmenting the SSN with commercial/international data
  - Needed for projected increase in space debris and projected increase in satellite population
  - Characterization mission will increase SSN workload

### 2. Establish National and International Debris Mitigation Policy

- Promote debris mitigation limitation
  - Implications in spacecraft design and launch and payload deployment procedures

### 3. Review Global Surveillance and Sensor Policies and PDD 23

- Modify the PDD to allow commercial sale of imagery of less than 1 meter resolution
- Develop policy on commercial surveillance systems
  - Allow international participation in ERM and in characterization of the atmosphere and ocean areas
  - Support collection and integration of worldwide data
  - Address current lack of information protocols and security issues
  - Allow placement of US sensor packages on foreign satellites

#### **USSPACECOM LONG RANGE PLAN**

- Allow a global space environment partnership
- Address processing, dissemination and interoperability of surveillance systems
- Create policy on space-to-space surveillance to allow BDA-like reporting

## 4. Establish International Shared Characterization of Space High Interest Object Policy

- New US policy on cooperation with Allies, coalition and Space partners for characterization of military, civil, and commercial space objects
  - Cooperative inspection of payloads prior to launch
  - Designed to build cooperation and reduce characterization requirements in space
  - Cooperation with foreign commercial, civil, and military organizations

### 5. Establish International Space Sovereignty Policy

- Identification of US reaction to attack on satellites
- Deter attacks on US satellites
  - ◆ Define "interference with space systems"
  - ◆ Interference with commercial systems viewed as an infringement on a nation's sovereign right
  - "Guarantees" protection of National (commercial) space assets
- Ramifications: measured response on an international scale

### 6. Review National Commercial Space Launch

- Reconstitution and repair mission points to the need for a policy change that allows domestic launch of military payloads
- Remove impediments to commercial access to the most timely and flexible launch services available
- Allow launch of National payloads on non-DoD launchers
  - Promote commercial competition
  - ◆ Maximize launch customer support
  - ♦ Reduce costs
  - Stop restrictions on use of foreign launch vehicles in support of US military space applications
  - Assign personnel to tours with industry

- Expedite commercial partnering
- ◆ Promote common payload interfaces

# 7. Establish Communications Acquisition, Interoperability, and Standards Policies

- Increase interoperability and processing efficiency of communications networks
- Address acquisition of communications systems vice ground terminals and transponders only
- Address commercial standards and co-location of military and commercial gateways
- Address narrowband PCS and wideband network systems

# 8. Review Aeronautics and Astronautics Coordination Board (AACB)

- Recommend changes to promote satellite autonomy and fewer ground stations
- Address interagency cooperation
- Promote common hardware and software, RF spectrum compatibility, joint standards, efficient use of RF spectrum, and Satellite Communications Protocol Standards (SCPS)

#### 9. Establish International SATOPS Policy

- Designed for Global Traffic Control
  - Defines means and procedures for space "FAA-like" operations
  - Support policy changes that give industry the lead in this area
  - Recommend international participation in the Global Traffic Control Agency (Space FAA)

#### 10. Review ABM Treaty

- Change US policy on shared warning agreements
- Broaden shared warning agreements into full BMD
- Using allied BMD in a theater
- Change policy to modify technology transfer to support integrated BMC3
- Change policy—address security issues to allow integrated BMC3
  - Accommodates neighbor nations sensitivities
  - Prevents arms race among nations

- 11. Review National and Foreign Command and Control Agreements to include Space C2 Issues
- Recommend promotion of space C2 system integration
- Promote C2 sensor augmentation
- Promote security with commercial and international standards
- Promote communications network protocols
- Promote potential partnerships and assess options
- Promote foreign interoperability

## 12. Review and Update National and Shared Warning Policies

- Recommend clarification of who gets warning information
- Address allied warning policy
- Clarify coalition warning policy
- Address release issues
- Promote a common architecture
- Address security issues method/source/ technology
- Address timeliness of warning data policy
- Address optional arrangements assessed
- Address message content

# 13. Establish International METOC/ERM Standardization Policy

- Address full three-dimensional, near-real-time coverage of the space environment
- Promote interoperability and standardization of hardware, software, and protocols for space weather monitoring
- Address multi-level security issues in partnering arrangements

## 14. Establish Space System Protection, Negation, and Force Application Policies

 Address US space-based Negation and Force Applications capabilities

- Policy on "sovereignty of space systems" and international law for protection of National space assets
  - ◆ Define "interference with space systems"
  - Define interference with commercial systems viewed as an infringement on a nation's sovereign right
  - "Guarantee" protection of National (commercial) space assets
  - ◆ Identify ramifications: measured response on an international scale
  - Shape international community to accept space-based weapons to defend against threats in accordance with national policy

#### 15. Establish Space Faring Nations Treaty

 Address goals for space sovereignty, system design parameters, system employment, and other areas of common concern

#### 16. USSPACECOM/NRO/NASA MOAs

Clarify roles on advocacy of military space requirements

#### 17. USSPACECOM/Industry MOAs

 Promote common technology, design protocol and employment goals on future space system development

#### 18. USSPACECOM Interagency MOAs

Expand cooperative agreements for future military applications of space-based capabilities

#### 19. Review National Space Policy

Ensure consistency with proposed policy recommendations